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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/427,263	10/26/1999	RICHARD HANS HARVEY	Q56191	2940
7590	04/21/2005		EXAMINER	
Richard F Jaworski Cooper & Dunham LLP 1185 Avenue of the Americas New York, NY 10036			ALAM, SHAHID AL	
			ART UNIT	PAPER NUMBER
			2162	

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/427,263	HARVEY, RICHARD HANS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shahid Al Alam	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 January 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 – 5, 12, 31 – 35, 41, 56 – 58, and 60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 – 5, 12, 31 – 35, 41, 56 – 58, and 60 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed January 3, 2005 have been fully considered but they are not persuasive for the following reasons.

Applicant argues that there is no teaching or suggestion in the cited art of storing concurrently in at least two entry tables both the syntax normalized form and the protocol encoded form and no teaching or suggestion in the cited art of a method of locating data in a database, wherein said data is stored in at least two entry tables in a protocol encoded raw form and linked to a concurrently stored syntax-normalized form of the data.

Examiner respectfully disagrees all of the allegations as argued. Examiner, in his previous office action, gave detail explanation of claimed limitation and pointed out exact locations in the cited prior art.

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification, see MPEP 2111.

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 162 USPQ 541,550-51 (CCPA 1969).

In response to Applicant's argument that no teaching or suggestion in the cited art of storing concurrently in at least two entry tables both the syntax normalized form and the protocol encoded form, Examiner submits that Leung reference strongly suggest a DIT and ENTRY, wherein the structure part consists of two objects, the DIT and ENTRY, stored as two relational tables (see page 739, column 1, first paragraph).

In response to Applicant's argument that no teaching or suggestion in the cited art of a method of locating data in a database, wherein said data is stored in at least two entry tables in a protocol encoded raw form and linked to a concurrently stored syntax-normalized form of the data, Examiner submits that Leung reference teaches the ENTRY table holds detailed information about each directory object. Each record holds the system identifier of an object, and an attribute value of an attribute type of the object in both normalized and raw forms (see page 739, column 1, first paragraph).

For the above reasons, Examiner believed that rejection of the last Office action was proper.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 5, 12, 31 – 35, 41, 56 – 58, and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by the publication, "An Object.-Oriented Approach to Directory Systems," by C.M.R. Leung, IEEE Region 10 Conference on Computer and Communications Systems, September, 1990, Hong Kong, pages 736 – 740, hereinafter, "Leung."

With respect to claim 1, Leung teaches a method of storing data in a database comprising: obtaining both a protocol-encoded raw form of data to be stored and a syntax-normalized form of said data; and storing concurrently in at least two entry tables both the syntax-normalized form and protocol-encoded raw form of said data (Page 738, column 2, Figure 6 and Page 739, column 1, First paragraph).

As to claim 2, first obtaining the protocol-encoded form of data; and then generating a syntax-normalized form of data (page 738, col. 2).

As to claim 3, maintaining both the syntax-normalized and protocol-encoded form of data for database searching and data retrieval (page 738, column 2, last paragraph).

As to claim 4, maintaining said protocol encoded raw form and syntax-normalized form of data in at least two entry tables (Figure 6 of page 738, column 2, shows tables).

As to claim 5, correlating the storage location of said protocol-encoded raw form and said syntax-normalized form in said at least two entry tables (Figure 6 of page 738, column 2, shows tables).

As to claim 12, a method of locating data in a database wherein the data is stored linked to a syntax-normalized form of the data and comprising the step of locating said data by searching on said syntax-normalized form of the data (page 738, column 2, Figure 6).

Claims 31 – 35 are essentially the same as claims 1 – 5 except that they set forth the claimed invention as an apparatus rather than a method and rejected for the same reasons as applied above.

Claim 41 is essentially the same as claim 12 except it sets forth the claimed invention as an apparatus rather than a method and rejected for the same reasons as applied above.

With respect to claim 56, Leung further teaches an apparatus for transferring data in and out of a database for a directory service system wherein the data is stored in protocol-encoded form and in syntax-normalized from as claimed comprising means for finding data in the database using a syntax-normalized form; and means for transferring data out of the database using a protocol-encoded form (Page 738, column 2, Figure 6 and Page 739, column 1, First paragraph).

Claim 57 is essentially the same as claim 1 except it sets forth the claimed invention as a computer program product rather than a method and rejected for the same reasons as applied above.

As to claims 58 and 60 which further limit the protocol-encoded form as being ASN.1 formats, see Leung, page 736, column 1 and 2, Sections, "Introduction" and "Directory Systems" that detail various directory services standards.

***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shahid Al Alam whose telephone number is (571) 272-4030. The examiner can normally be reached on Monday-Thursday 8:00 A.M.- 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Shahid Al Alam  
Primary Examiner  
Art Unit 2162

18 April 2005